



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2020-0258; Product Identifier 2018-SW-002-AD]

RIN 2120-AA64

Airworthiness Directives; Leonardo S.p.A. Helicopters

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: The FAA proposes to adopt a new airworthiness directive (AD) for Leonardo S.p.A. Model AW169 helicopters. This proposed AD would require modifying the weight on wheels (WoW) support installation on the main landing gear (MLG). This proposed AD is prompted by a report that an inappropriately tightened WoW support could result in a rotation of the support and improper WoW switch performance. The actions of this proposed AD are intended to correct an unsafe condition on these products.

DATES: The FAA must receive comments on this proposed AD by [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: You may send comments by any of the following methods:

- Federal eRulemaking Docket: Go to <https://www.regulations.gov>. Follow the online instructions for sending your comments electronically.
- Fax: 202-493-2251.

- Mail: Send comments to the U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590-0001.

- Hand Delivery: Deliver to the “Mail” address between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

Examining the AD Docket

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0258; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD, any comments received, and other information. The street address for Docket Operations is listed above. Comments will be available in the AD docket shortly after receipt.

For service information identified in this proposed rule, contact Leonardo S.p.A. Helicopters, Emanuele Bufano, Head of Airworthiness, Viale G.Agusta 520, 21017 C. Costa di Samarate (Va) Italy; telephone +39-0331-225074; fax +39-0331-229046; or at <https://www.leonardocompany.com/en/home>. You may view the referenced service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177.

FOR FURTHER INFORMATION CONTACT: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email matthew.fuller@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

The FAA invites you to participate in this rulemaking by submitting written comments, data, or views. The FAA also invites comments relating to the economic, environmental, energy, or federalism impacts that might result from adopting the proposals in this document. The most helpful comments reference a specific portion of the proposal, explain the reason for any recommended change, and include supporting data. To ensure the docket does not contain duplicate comments, commenters should send only one copy of written comments, or if comments are filed electronically, commenters should submit only one time.

The FAA will file in the docket all comments received, as well as a report summarizing each substantive public contact with FAA personnel concerning this proposed rulemaking. Before acting on this proposal, the FAA will consider all comments received on or before the closing date for comments. The FAA will consider comments filed after the comment period has closed if it is possible to do so without incurring expense or delay. The FAA may change this proposal in light of the comments received.

Discussion

EASA, which is the Technical Agent for the Member States of the European Union, has issued EASA AD No. 2017-0255, dated December 22, 2017, to correct an unsafe condition for Leonardo S.p.A Helicopters (formerly Finmeccanica Helicopter Division, AgustaWestland) Model AW169 helicopters, with left-hand (LH) MLG assembly part number (P/N) 6F3210V00132 or P/N 6F3210V00133 and serial number

(S/N) MN01 to MN84 inclusive, and/or a right-hand (RH) MLG assembly P/N 6F3210V00232 or P/N 6F3210V00233 with S/N MN01 to MN81 inclusive installed, except those with an MLG modified per Magnaghi Aeronautica S.p.A. Service Bulletin SB-07-2017-AW169.

EASA advises that an in-service event revealed that an inappropriately tightened WoW support could result in a rotation of this support and improper WoW switch performance. EASA advises this condition, if not corrected, could result in degraded attitude stabilization, possibly resulting in reduced control of the helicopter. Accordingly, the EASA AD requires modification of the WoW support installation by introducing structural glue between the WoW support and the main fitting of the MLG.

FAA's Determination

These helicopters have been approved by EASA and are approved for operation in the United States. Pursuant to the FAA's bilateral agreement with the European Union, EASA has notified the FAA about the unsafe condition described in its AD. The FAA is proposing this AD after evaluating all known relevant information and determining that an unsafe condition is likely to exist or develop on other helicopters of the same type designs.

Related Service Information Under 1 CFR part 51

The FAA reviewed Leonardo Helicopters Alert Service Bulletin No. 169-047, Revision A, dated February 19, 2018, for Model AW169 helicopters. This service information specifies a WoW support bonding procedure on in-service helicopters by introducing structural glue between the WoW support P/N G1019/20-91 and the main fitting P/N G1019/20-MF 105 to prevent a potential rotation of the support.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Proposed AD Requirements

This proposed AD would require, within 60 hours time-in-service (TIS), modifying the WoW support installation by:

- Performing a short circuit connection between pin 26 of connector J343 and pin N of connector J319.
- Cutting lockwire and disconnecting the WoW microswitch from the WoW support, removing from service nuts and bolts, and removing the WoW support from the MLG.
- Removing any paint, cleaning areas, and applying Alodine 1132 on cleaned surfaces.
- Applying a 10 mm wide strip of structural glue EA934 on the WoW support, reinstalling the WoW support on the MLG, adding a specified torque to the nut, and cleaning off excess glue.

- Curing the glue on the structures, performing a microswitch adjustment inspection for correct operation of the microswitch, and marking the MLG nameplate by adding the letter “B” at the end of the S/N.

After the effective date of the proposed AD, installing an affected LH or RH MLG assembly on any helicopter would be prohibited unless it has been modified in accordance with the proposed AD requirements.

Differences between this Proposed AD and the EASA AD

The EASA AD requires compliance within 60 hours TIS or 3 months, whichever occurs first, while this proposed AD would require compliance within 60 hours TIS.

Costs of Compliance

The FAA estimates that this AD affects 3 helicopters of U.S. Registry. The FAA estimates that operators may incur the following costs in order to comply with this AD. Labor costs are estimated at \$85 per work-hour.

Performing the short circuit connection, removing the WoW support from the MLG, removing any paint and cleaning areas, applying Alodine and a 10mm strip of structural glue, curing the glue, torqueing the nut, performing a microswitch adjustment, and marking the MLG nameplate would take about 8 work-hours and parts would cost about \$10 for an estimated cost of \$690 per helicopter and \$2,070 for the U.S. fleet.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

The FAA determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed, I certify this proposed regulation:

1. Is not a “significant regulatory action” under Executive Order 12866;
2. Will not affect intrastate aviation in Alaska; and
3. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Leonardo S.p.A.: Docket No. FAA-2020-0258; Product Identifier 2018-SW-002-AD.

(a) Applicability

This AD applies to Leonardo S.p.A. Model AW169 helicopters, certificated in any category, with left-hand (LH) main landing gear (MLG) assembly, part number (P/N) 6F3210V00132 or P/N 6F3210V00133, with serial number (S/N) MN01 through MN84 inclusive, or right-hand (RH) MLG assembly, P/N 6F3210V00232 or P/N 6F3210V00233, with S/N MN01 to MN81 inclusive, installed. This AD does not apply to helicopters with an MLG that has been modified in accordance with Magnaghi Aeronautica S.p.A. Service Bulletin No. SB-07-2017-AW169, Issue 5, dated November 22, 2017. This AD does not apply to MLG that have a “B” on the end of the serial number.

(b) Unsafe Condition

This AD defines the unsafe condition as an improperly tightened weight on wheels (WoW) support resulting in a rotation of the support and improper WoW switch performance, which if not corrected could lead to degraded attitude stabilization, and subsequent loss of control of the helicopter.

(c) Comments Due Date

The FAA must receive comments by [INSERT DATE 60 DAYS AFTER DATE
OF PUBLICATION IN THE Federal Register].

(d) Compliance

You are responsible for performing each action required by this AD within the specified compliance time unless it has already been accomplished prior to that time.

(e) Required Actions

(1) Within 60 hours time-in-service, modify the WoW support installation as follows:

(i) Perform a short circuit connection between pin 26 of connector J343 and pin N of connector J319.

(ii) Cut the lockwire that locks the WoW microswitch and disconnect the WoW microswitch from the WoW support as depicted in Figure 1 of Leonardo Helicopters Alert Service Bulletin No. 169-047, Revision A, dated February 19, 2018 (ASB 169-047).

(iii) Unscrew the nut and remove the washer and bolt. Remove from service the nut and bolt, but replace the washer.

(iv) Remove the WoW support from the MLG and remove any paint and clean areas where indicated by Figure 2 in ASB 169-047.

(v) Apply Alodine 1132 on cleaned areas of WoW support and landing gear strut leaving a 10 mm wide strip on the WoW support for structural glue EA934 application.

(vi) Apply a 10 mm wide strip of structural glue EA934 on the WoW support and install the WoW support on the MLG using a nut, bolt, and washer.

(vii) Torque the nut to 2.5 thru 3.5 Nm. Clean any excess glue and cure the glue on the structures for one hour at 60°C / 140°F or eight days at room temperature (22°C - 26°C / 71.6°F - 78.8°F).

(viii) Apply liquid jointing compound AMS-S-8802 Type 2 Class B, or equivalent, to the bolt and nut, as depicted in Figure 3 of ASB 169-047 and perform a microswitch adjustment for correct operation of the microswitch.

(ix) Mark the MLG nameplate by adding the letter “B” at the end of the S/N.

(x) Remove the short circuit connection between pin 26 of connector J343 and pin N of connector J319 as performed in paragraph (e)(1)(i) of this AD.

(2) After the effective date of this AD, do not install on any helicopter a LH or RH MLG assembly with a P/N and S/N listed in paragraph (a) of this AD unless it has been modified in accordance with the requirements of paragraph (e)(1) of this AD.

(f) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Safety Management Section, Rotorcraft Standards Branch, FAA, may approve AMOCs for this AD. Send your proposal to: Matt Fuller, Senior Aviation Safety Engineer, Safety Management Section, Rotorcraft Standards Branch, FAA, 10101 Hillwood Pkwy., Fort Worth, TX 76177; telephone 817-222-5110; email 9-ASW-FTW-AMOC-Requests@faa.gov.

(2) For operations conducted under a 14 CFR part 119 operating certificate or under 14 CFR part 91, subpart K, the FAA suggests that you notify your principal inspector, or lacking a principal inspector, the manager of the local flight standards district office or certificate holding district office before operating any aircraft complying with this AD through an AMOC.

(g) Additional Information

The subject of this AD is addressed in European Union Aviation Safety Agency (previously European Aviation Safety Agency) (EASA) AD No. 2017-0255, dated December 22, 2017. You may view the EASA AD on the Internet at <https://www.regulations.gov> in the AD Docket.

(h) Subject

Joint Aircraft Service Component (JASC) Code: 3200, Landing Gear System.
Issued on March 10, 2020.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

[FR Doc. 2020-05246 Filed: 3/13/2020 8:45 am; Publication Date: 3/16/2020]